Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Previously Amended) A routing processing method in a packet transmission for an input packet as an object for routing, comprising the steps of:

performing a process for identifying an application for transmission of said input packet;

performing a process for setting a timer value provided for the identified application;

performing a process for routing the input packet to determine a transmission destination port on the basis of a destination address stored in a routing table; and

performing a process of abandoning the input packet or transferring the input packet to a predetermined route when the routing process exceeds the set timer value.

2.   (Previously Amended) A packet transmission routing processing system performing a routing process for an input packet, comprising:

parsing and timer processing means for identifying an application corresponding to transmission of said input packet and monitoring a timer value associated with said application, said timer value corresponding to a maximum time set for completion of routing of the input packet; and

routing and transferring means for determining a transmission destination port on the basis of a destination address stored in a routing table, for routing said input packet to said transmission destination port and for disposing of the input packet or transferring the input packet to a preliminarily determined route dependent on the identified application when a time for routing of said input packet exceeds the timer value.

3. (Currently Amended) A packet transmission routing processing system as set forth in claim 2, wherein said parsing and timer processing means and said routing and transferring processing means comprises:

a packet accumulating portion accumulating said input packet;

a packet parsing portion performing parsing for identifying the application corresponding to the input packet from said packet accumulating portion, generating an application identification number, and reading out of a destination address;

a packet waiting portion for holding the input packet from said packet parsing portion and transmitting the input packet in response to a packet output command;

a packet transferring portion for transferring the packet output from the packet waiting portion to said transmission destination port on the basis of a transmission destination designation and a next process code;

a timer value determining portion outputting said timer value and said next process code corresponding to the application identified by said packet parsing portion;

a monitoring timer portion outputting a time out signal upon termination of measurement of the timer value from said timer value determining portion; and

a routing retrieving portion for performing a routing retrieving processing by outputting said packet output command to the packet waiting portion and outputting a transfer path number and a process code to said packet transferring portion when the routing process based on the destination address is input from said packet parsing portion or said time out signal is input from said monitoring timer portion.

4. (Previously Amended) A packet transmission routing processing system as set forth in claim 3, wherein a predetermined process is performed upon time-out of said timer value when said routing retrieving process is not completed within a period designated by the timer value; and

said next processing code is a code designating the processing of the input packet when the routing retrieving process in said routing retrieving portion is not completed within the period designated by the timer value.

5. (Previously Amended) A packet transmission routing process system as set forth in claim 4. wherein said predetermined process of said timer value is to terminate the routing process [irrespective of normal or abnormal of the result of process within the period designated by the routing retrieval period of the timer value], and -

the process of the input packet in the next process code is abandonment of the input packet or transferring the input packet to a predetermined path when the transmission destination cannot be determined.

6. (Previously Amended) A packet transmission routing process system as set forth in claim 3, wherein, as said monitoring timer portion comprises a counter.

7. (Previously Amended) A packet transmission routing processing system as set forth in claim 3, wherein said timer value determining portion comprises:

an application judgment portion for generating an address at a value the same as an application identification number from the packet parsing portion or a value derived by multiplying or dividing said application identification number by an integer; and

a random access memory reading out the stored timer value and the next process code for outputting to said monitoring timer and said routing retrieving portion corresponding to the address from said application judgment portion.

8. (Original) A packet transmission routing processing system as set forth in claim 3, wherein said timer value determining portion comprises:

a content-addressable memory storing said application identification number, said timer value and said next process code in combination, said content-addressable memory outputs the timer value and the next process code stored therein on the basis of the input application identification number.

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9.   (Previously Amended) A packet transmission routing processing system as set forth in claim 7, wherein said random access memory comprises a detachable and rewritable storage element.

10.   (Original) A packet transmission routing processing system as set forth in claim 7, which further includes input operation and storage processing means for rewriting said timer value in said random access memory.

11.   (Original) A packet transmission routing processing system as set forth in claim 7, which further includes an external storage data modifying device connected to said random access memory for rewriting the timer value.

12.   (Original) A packet transmission routing processing system as set forth in claim 7, which further includes an external storage data modifying and communicating device receiving a designation data from a communication network for modifying said timer value of said random access memory.

13.   (Previously Amended) A packet transmission routing processing system as set forth in claim 3, wherein said routing retrieving portion comprises a processing unit including a microprocessor or a digital signal processor executing a sequence for outputting said packet output command to the packet waiting portion, and outputting said transfer path number and the process code to said packet transferring portion when the routing process based on the destination address from the packet parsing portion is completed or after input of the time out signal from said monitoring timer.

14.   (Previously Amended) A packet transmission routing processing system as set forth in claim 3, wherein the application identified by said parsing and timer processing means comprises an internet telephone protocol in a TCP/IP communication network.

15.   (Canceled)

16.   (Previously Amended) A packet transmission routing processing system as set forth in claim 2, wherein the timer value is in a range of 10 msec. to 50 msec.

17. (Original) A packet transmission routing processing system as set forth in claim 8, wherein said content-addressable memory is a detachable and rewritable storage element.

18. (Original) A packet transmission routing processing system as set forth in claim 8, which further includes input operation and storage processing means for rewriting said timer value in said content-addressable memory.

19. (Original) A packet transmission routing processing system as set forth in claim 8, which further includes an external storage data modifying device connected to said content-addressable memory for rewriting the timer value.

20. (Original) A packet transmission routing processing system as set forth in claim 8, which further includes an external storage data modifying and communicating device receiving a designation data from a communication network for modifying said timer value of said content-addressable memory.